Appendix C6 – Source Identification (Watershed Restoration Projects)

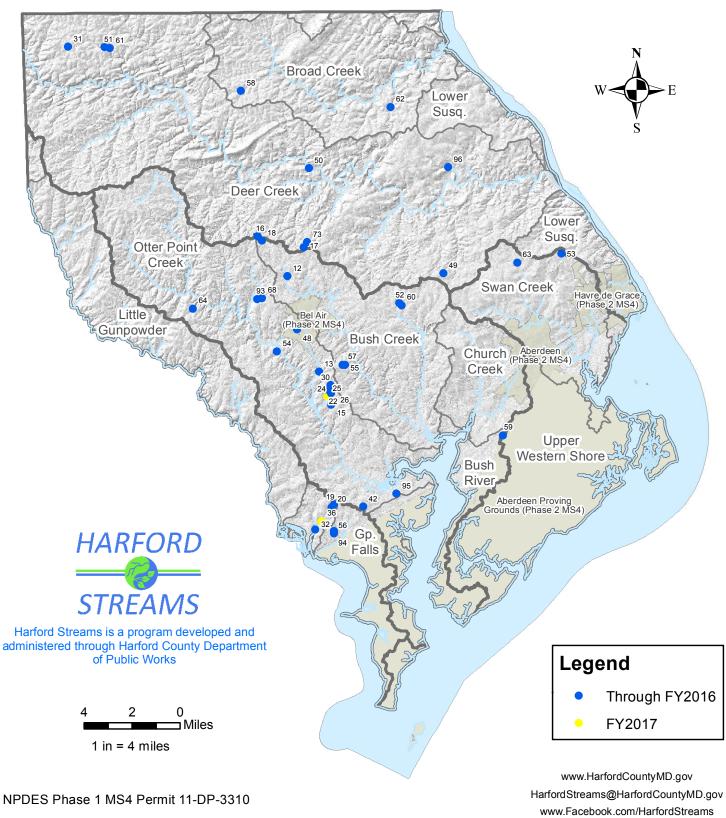
#### Appendix C6

#### Harford County, MD Department of Public Works Watershed Protection and Restoration



(410) 638-3217

Restoration Projects Completed (Nov 2, 2009 - Jun 30, 2017)







	Project	Construction Complete	Number of BMPs	Impervious Credits (ac)	Total <sup>1</sup> Cost	Grants	Cost per Credit
WP000025	Wheel Creek at Country Walk 1B SWM Retrofit	Jun 2017	1	3.66	\$530,480	\$121,623	\$144,940
WP000036	Foster Branch at Dembytown Stream Restoration	Apr 2017	2	21.20	\$915,752	\$500,000	\$43,196
WP000024	Wheel Creek at Country Walk 1A SWM Retrofit	Jun 2016	2	8.66	\$588,826	\$324,119	\$67,994
WP000026	Wheel Creek at Festival at Bel Air SWM Retrofit	Feb 2016	1	12.00	\$385,601	\$195,436	\$32,133
WP000095	Willoughby Beach Road Tree Planting	Oct 2015	1	0.57	\$11,844	\$11,844	\$20,779
WP000096	Trappe Church Road Tree Planting	Oct 2015	2	0.27	\$6,802	\$6,802	\$25,194
WP000073	Hickory Elementary Retrofit	Jul 2015	1	0.75	\$82,199	\$0	\$109,598
WP000031	Norrisville Elementary Bioretention	Jun 2015	1	0.63	\$112,600	\$50,000	\$180,160
WP000055	Patterson Mill High School Tree Planting II	Apr 2015	1	1.22	\$25,519	\$25,519	\$20,917
WP000063	Rider Lane Tree Planting	Apr 2015	1	0.76	\$18,302	\$18,302	\$24,082
WP000051	Amoss Mill Road Tree Planting II	Apr 2015	1	0.21	\$6,291	\$6,291	\$29,958
WP000064	Oakmont Road Tree Planting	Apr 2015	1	0.44	\$7,761	\$7,761	\$17,639
WP000052	Edwards Lane Tree Planting II	Apr 2015	4	1.70	\$30,772	\$30,772	\$18,101
WP000093	Red Pump Elementary School Tree Planting II	Apr 2015	3	0.66	\$17,742	\$17,742	\$26,881

<sup>1</sup> Projects with Total Cost blank were not initiated as a restoration project and were completed for other reasons. Therefore, funding has been intentionally left blank.

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	Project	Construction Complete	Number of BMPs	Impervious Credits (ac)	Total <sup>1</sup> Cost	Grants	Cost per Credit
WP000094	Magnolia Middle School Tree Planting II	Apr 2015	2	0.47	\$12,267	\$12,267	\$26,101
WP000020	Woodbridge Stream Restoration	Apr 2015	1	12.40	\$553,083	\$258,832	\$44,603
WP000061	Amoss Mill Road Tree Planting	Oct 2014	1	0.18	\$8,448	\$8,448	\$46,933
WP000062	Harford Christian School Tree Planting	Oct 2014	1	0.62	\$15,972	\$15,972	\$25,761
WP000060	Edwards Lane Tree Planting	Oct 2014	2	0.97	\$25,952	\$25,952	\$26,755
WP000032	Foster Branch at Trimble Road Stream Restoration	May 2014	1	12.10	\$570,051	\$275,000	\$47,112
WP000054	Mt Soma Property Tree Planting	Apr 2014	2	0.97	\$28,684	\$28,684	\$29,571
WP000056	Magnolia Middle School Tree Planting	Apr 2014	1	0.23	\$5,295	\$5,295	\$23,022
WP000059	Perryman Wellfield Tree Planting	Apr 2014	2	1.81	\$43,183	\$43,183	\$23,858
WP000058	North Harford High School Tree Planting	Apr 2014	1	0.15	\$3,593	\$3,593	\$23,953
WP000019	Woodbridge SWM Retrofit	Oct 2013	1	3.80	\$256,467	\$0	\$67,491
WP000048	Heaven Waters Boulton Street Tree Planting	Oct 2013	1	0.20	\$7,546	\$7,546	\$37,730
WP000050	Walters Mill Tree Planting	Oct 2013	3	1.09	\$31,099	\$31,099	\$28,531
WP000053	Harford Center Tree Planting	Oct 2013	1	0.22	\$9,983	\$9,983	\$45,377

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	Project	Construction Complete	Number of BMPs	Impervious Credits (ac)	Total <sup>1</sup> Cost	Grants	Cost per Credit
WP000049	Churchville Recreation Complex Tree Planting	Oct 2013	1	0.24	\$7,434	\$7,434	\$30,975
WP000022	Wheel Creek at Gardens of Bel Air SWM Retrofit	Jul 2013	1	4.79	\$322,120	\$178,804	\$67,248
WP000030	Wheel Creek at Calvert Walks Stream Restoration	May 2013	1	7.25	\$324,682	\$204,951	\$44,784
WP000057	Patterson Mill High School Tree Planting	Apr 2013	1	0.82	\$23,688	\$23,688	\$28,888
WP000068	Cedarwood Pump Station Demolition	Aug 2012	1	0.05			
WP000018	Friends Pond SWM Retrofit	Oct 2011	1	11.70	\$109,761	\$0	\$9,381
WP000012	Bynum Ridge Stream Stablization	Jul 2011	1	4.65	\$225,212	\$0	\$48,433
WP000017	Hickory Elementary School Bioretention	Jun 2011	1	0.60	\$179,013	\$0	\$298,354
WP000016	Forest Hill Elementary School Bioretention	Jun 2011	1	0.91	\$102,804	\$0	\$112,972
WP000013	Plumtree Run at Tollgate Stream Restoration	May 2011	1	16.80	\$428,877	\$215,000	\$25,528
WP000042	Washington Court Demolition	Jan 2011	1	2.11			
WP000015	Abingdon Library Bioretention	Oct 2010	1	0.60	\$106,644	\$53,322	\$177,740

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<sup>1</sup> Projects with Total Cost blank were not initiated as a restoration project and were completed for other reasons. Therefore, funding has been intentionally left blank.



Completed Capital Improvement Projects (MS4 Permit 11-DP-3310)

Project	Construction Complete		Impervious Credits (ac)	Total <sup>1</sup> Cost	Grants	Cost per Credit
		Totals	138.45	\$6,142,349	\$2,725,265	\$44,364



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<sup>1</sup> Projects with Total Cost blank were not initiated as a restoration project and were completed for other reasons. Therefore, funding has been intentionally left blank.

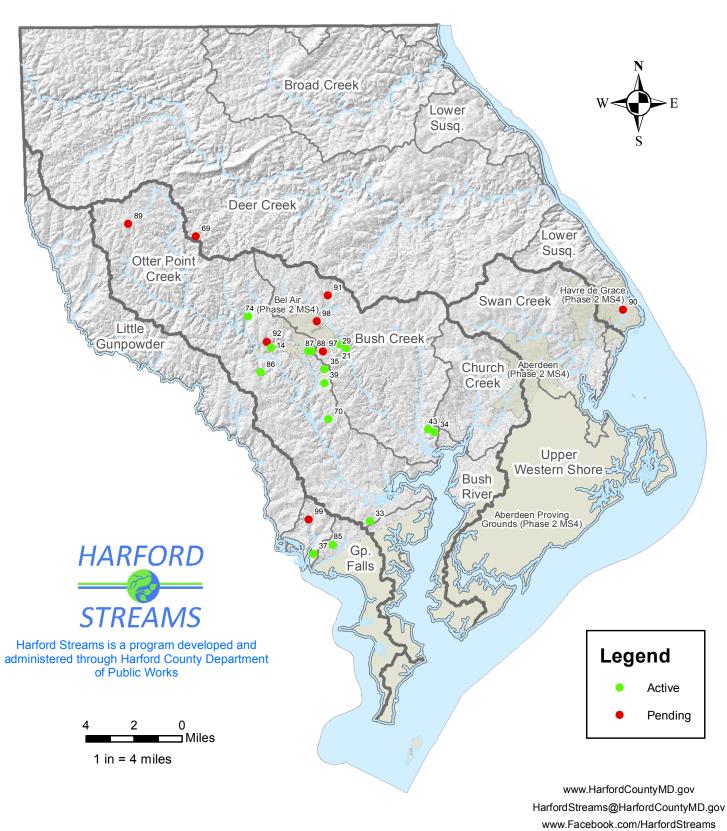
#### Appendix C6

### Harford County, MD Department of Public Works Watershed Protection and Restoration



(410) 638-3217

Restoration Projects Active or Pending during FY2017







		Construction		Impervious	Total	Crants	Cost per Credit
	Project	Start	BMPs	Credits (ac)	Cost	Grants	Credit
WP000027	Lower Wheel Creek SWM Retrofit & Stream Restoration	8/1/2016	6	65.81	\$2,147,002	\$1,420,177	\$32,624
WP000070	Abingdon Library Water Quality Improvements	5/1/2017	3	2.32	\$213,883	\$0	\$92,191
WP000046	Leight Center Parking Lot Green Infrastructure	6/1/2017	2	0.48	\$293,966	\$125,000	\$612,429
WP000074	Bear Cabin Branch Wetland and Stream Restoration	12/1/2017	1	36.80	\$1,090,000	\$775,000	\$29,620
WP000035	Ring Factory ES SWM Retrofit & Stream Restoration	12/1/2017	3	20.18	\$1,658,350	\$660,000	\$82,178
WP000088	Stormwater Retrofit at Homestead Elementary	3/1/2018	1	3.00	\$131,374	\$0	\$43,791
WP000029	Bynum at St Andrews Way Stream Restoration	4/1/2018	1	30.00	\$2,118,569	\$1,600,000	\$70,619
WP000033	Willoughby Beach SWM Retrofit & Stream Restoration	5/1/2018	6	33.20	\$1,634,509	\$1,100,000	\$49,232
WP000086	Annie's Playground Stream Restoration	6/1/2018	2	29.60	\$660,768	\$0	\$22,323
WP000039	Plumtree Run at Barrington Stream Restoration	7/1/2018	6	32.20	\$3,059,279	\$0	\$95,009
WP000034	Church Creek ES SWM Retrofit & Stream Restoration	7/1/2018	3	24.22	\$1,678,180	\$0	\$69,289
WP000014	Heavenly Pond Wetland & Stream Creation	7/1/2018	1	8.00	\$957,187	\$0	\$119,648
WP000037	Foster Branch at Stillmeadow Stream Restoration	7/1/2018	3	21.69	\$1,829,770	\$0	\$84,360

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Active Capital Improvement Projects (MS4 Permit 11-DP-3310)



	Project	Construction Start	Number of BMPs	Impervious Credits (ac)	Total Cost	Grants	Cost per Credit
WP000087	Tributary to Plumtree Run at Wakefield Manor Stream Restorati	9/1/2018	1	3.00	\$94,554	\$0	\$31,518
WP000021	Sunnyview Drive Stream Restoration	9/1/2018	1	30.00	\$1,264,928	\$0	\$42,164
WP000085	Magnolia Elementary & Middle Campuses	7/1/2019	1	20.00	\$1,146,954	\$0	\$57,348
WP000043	Northwest Branch Declaration Run Stream Restoration	7/1/2019	1	19.40	\$1,206,252	\$0	\$62,178
			Totals	379.90	\$21,185,524	\$5,680,177	\$55,766



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		Impervious	Total
	Project	Credits (ac)	Cost
WP000099	Foster Branch at Pine Road Stream Restoration	30	\$1,600,000
WP000098	Shamrock Run at Broadway Stream Restoration	27	\$1,500,000
WP000097	Woodland Run Stream Restoration	18	\$990,000
WP000092	Tributary to Winters Run at Brentwood Park Stream Restoration	32	\$1,750,000
WP000091	C Milton Wright Stormwater Retrofit and Stream Restoration	35	\$1,880,000
WP000090	Lilly Run Stream Restoration	11	\$600,000
WP000089	Jarrettsville Elementary School Retrofit	3	\$225,000
WP000069	Jarrettsville Highways Shop SWM Retrofit	3	\$225,000
	Totals	159	\$8,770,000



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